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| 10/771,294 | 02/05/2004 | Masaru Izawa | 12014-0010DV | 3231 |

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| EXAMINER |
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MORILLO, JANEL COMBS

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| ART UNIT | PAPER NUMBER |
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1793

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12/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/771,294

Applicant(s)

IZAWA ET AL.

Examiner

Janelle Combs-Morillo

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esler (US 3,798,074) in view of "Metals Handbook Desk Edition" p 1157-1158.

Esler teaches a method for forming a protective surface coating on a steel substrate (abstract, column 5 line 64), said coating comprising: Zn (column 6 line 61), phosphoric acid (column 3 line 45), potassium in the amount of typically 0.2-0.6 mole per ml. (column 3 lines 22-23), which falls within the presently claimed coating composition (cl. 8, 9). Esler does not require fluoride ions for said coating. Esler teaches stainless steel can be subjected to said coating (column 5 lines 45-46, 65-66), which meets the amended limitation of "a steel composition containing 0.5 - 13% Cr".

Concerning claims 8-11, though Esler does not mention said coating is a 'conversion' coating, because the protective coating taught by Esler has a substantially identical chemical composition, then substantially the same chemical conversion properties are expected to result. Chemical conversion coatings are further discussed in "Metals Handbook Desk Edition", wherein Zn or Mn containing phosphate coatings are sprayed or immersion coated, and activated at temperatures ranging 32-99°C (Table 2, p 1158) and time of >5 min (Fig. 4, p 1158)

depending on the coating thickness desired. It would have been obvious to one of ordinary skill in the art to apply the chemical coating taught by Esler over time and temperatures taught by "Metals Handbook Desk Edition" because "Metals Handbook Desk Edition" teaches said parameters are sufficient for providing a given coating weight on a steel substrate.

Concerning claim 20, though Esler does not mention the surface treated steel material is a pipe, however, the prior art of Esler teaches that said coating is applied to a metal substrate (column 5 line 48-49). It would have been obvious to one of ordinary skill in the art to select a variety of metal substrate shapes, such as a pipe, given the disclosure of Esler. Changes in size, shape, or sequence of adding ingredients is prima facie obvious in the absence of new or unexpected results (see MPEP 2144.04).

Response to Amendment/Arguments

3. In the response filed on October 17, 2007, applicant amended claim 1, added new claim 20, and canceled claims 12-19. The examiner agrees that no new matter has been added.

4. The examiner agrees the present amendment overcomes the rejections in view of Rossio.

5. Applicant's arguments (response p 6-8) that the present invention is allowable over the prior art of record because Esler does not form a conversion coating has not clearly been found persuasive. As stated above, though Esler does not mention said coating is a 'conversion' coating, because the protective coating taught by Esler has a substantially identical chemical composition, then substantially the same chemical conversion properties are expected to result. Chemical conversion coatings are further discussed in "Metals Handbook Desk Edition", wherein Zn or Mn containing phosphate coatings are sprayed or immersion coated, and activated

at temperatures ranging 32-99°C (Table 2, p 1158) and time of >5 min (Fig. 4, p 1158) depending on the coating thickness desired. It would have been obvious to one of ordinary skill in the art to apply the chemical coating taught by Esler over time and temperatures taught by "Metals Handbook Desk Edition" because "Metals Handbook Desk Edition" teaches said parameters are sufficient for providing a given coating weight on a steel substrate.

Once a reference teaching product appearing to be substantially identical is made the basis of a rejection, and the examiner presents evidence or reasoning tending to show inherency, the burden shifts to the applicant to show an unobvious difference. "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products." *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)), see MPEP 2112. Applicant has not clearly shown an unobvious difference between the instant invention and the prior art's product.

6. Applicant's argument that the present invention is allowable over the prior art of record because applicant has demonstrated the criticality of potassium in forming a uniform film has not been found persuasive, because applicant has not established a clear nexus between said results and the instant claims. Applicant has not clearly shown specific unexpected results with respect to the prior art of record or criticality of the instant claimed range (wherein said results must be fully commensurate in scope with the instantly claimed ranges, etc. see MPEP 716.02 d). Applicant should establish a nexus between the rebuttal evidence and the claimed invention, i.e.,

objective evidence of nonobviousness must be attributable to the claimed invention, see MPEP 2144.08. The weight attached to evidence of secondary considerations by the examiner will depend upon its relevance to the issue of obviousness and the amount and nature of the evidence, see MPEP 716.01(b). Note the great reliance placed on this type of evidence by the Supreme Court in upholding the patent in *United States v. Adams*, 383 U.S. 39, 148 USPQ 479 (1966). To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 305 n.42, 227 USPQ 657, 673-674 n. 42 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCM 
November 30, 2007


ROY KING
SUPERVISORY PATENT EXAMINER
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